

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
13 January 2005 (13.01.2005)

PCT

(10) International Publication Number
WO 2005/002355 A1

(51) International Patent Classification⁷: A23J 3/14, A23I 1/20

(72) Inventors; and
(75) Inventors/Applicants (for US only): KAUR, Sarbjit [AU/AU]; 1 Braidwood Street, Enfield, New South Wales, 2135 (AU). FRYIRS, Catherine [AU/AU]; 1 Braidwood Street, Enfield, New South Wales, 2135 (AU). NEALE, Ray [AU/AU]; 1 Braidwood Street, Enfield, New South Wales, 2135 (AU).

(21) International Application Number: PCT/AU2004/000877

(74) Agents: STEARNE, Peter, Andrew, et al.; Davies Collison Cave, Level 10, 10 Barrack Street, Sydney, New South Wales, 2000 (AU).

(22) International Filing Date: 1 July 2004 (01.07.2004)

(25) Filing Language: English

(26) Publication Language: English

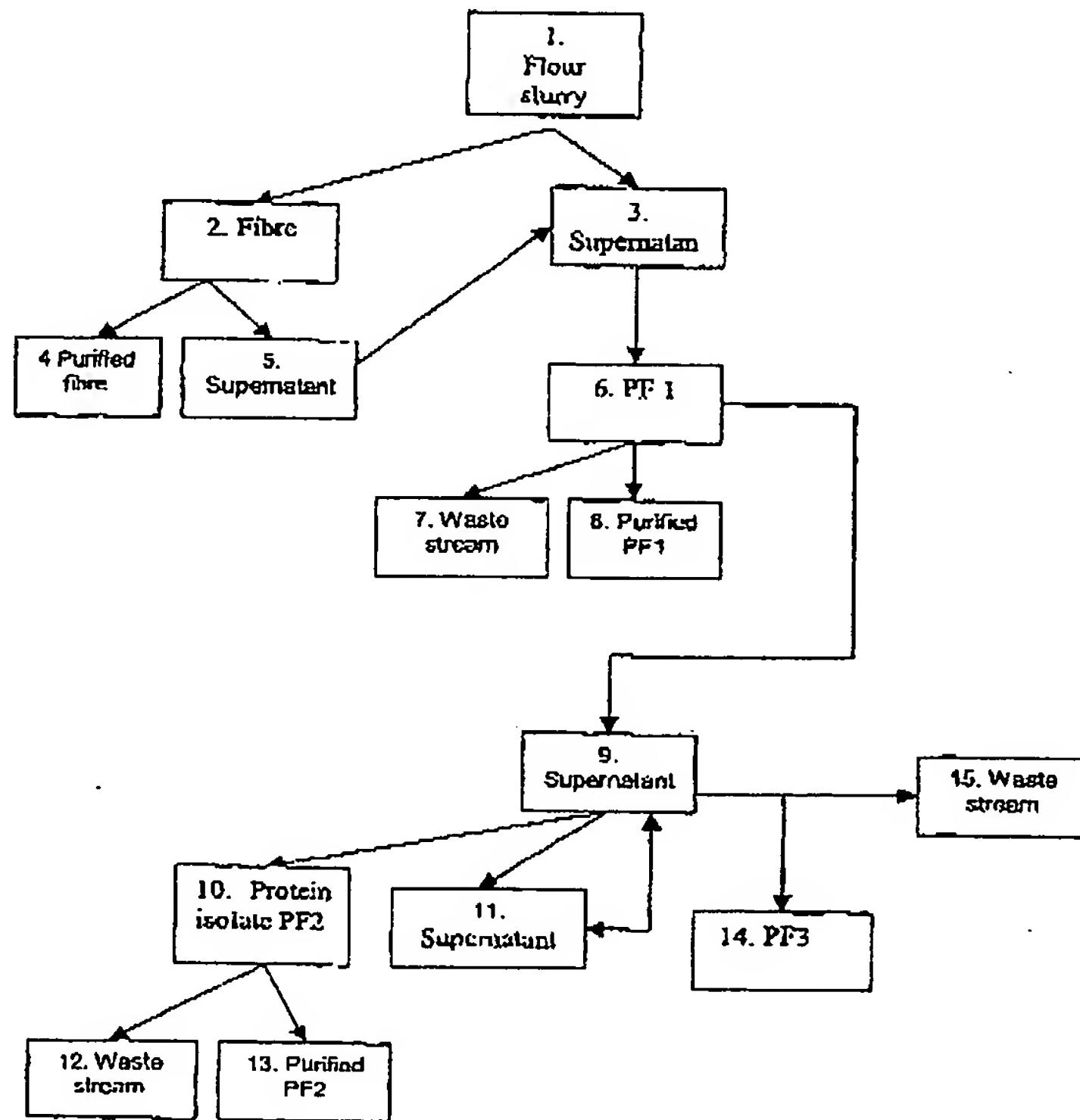
(30) Priority Data:
10/609,498 1 July 2003 (01.07.2003) US
2003903332 1 July 2003 (01.07.2003) AU

(71) Applicant (for all designated States except US): GEORGE WESTON FOODS LIMITED [AU/AU]; 821 Pacific Highway, Chatswood, New South Wales 2067 (AU).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,

(Continued on next page)

(54) Title: PROCESS FOR THE PRODUCTION OF LUPIN EXTRACTS



(57) Abstract: Process for the production of lupin extracts from lupins, comprising:
(a) extracting lupin meal or flour with water at alkaline pH; (a) separating an alkali soluble lupin protein containing component from an alkali insoluble fibrous component; (b) adjusting the pH of the protein component with acid to a pH between 3-5.0 to precipitate a food grade lupin protein extract (PF1), from an acid soluble lupin protein containing component, collecting said precipitated food grade lupin protein extract (PF1), adjusting the pH of the extract to pH 5-6.5 and thereafter drying the extract to give a proteinaceous extract (PF1); and optionally, (c) dehydrating the acid soluble lupin protein containing component to give a second food grade lupin protein extract (PF3); or (e) raising the pH of the acid soluble lupin protein component to pH 5.7, and optionally recovering a lupin protein isolate (PF2), followed by dehydrating the soluble lupin protein component to give a third food grade lupin protein fraction (PF3). Further, there is described a lupin hydrocolloid fraction and a lupin fibre fraction.

WO 2005/002355 A1



TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(84) **Designated States** (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SB, SI,

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.